



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,477	02/10/2004	Hisashi Kato	00862.100189.	8932

5514 7590 10/16/2007
FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

RODRIGUEZ, LENNIN R

ART UNIT	PAPER NUMBER
----------	--------------

2625

MAIL DATE	DELIVERY MODE
-----------	---------------

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/774,477

Applicant(s)

KATO, HISASHI

Examiner

Lennin R. Rodriguez

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

- (1) 116 in Fig. 1;
- (2) 401, 402, 403, 404, 405, 406 in Fig. 4;
- (3) 55 in Fig. 5;
- (4) 131, 133, 134 in Fig. 13;
- (5) 37 in Fig. 19.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

(1) page 17, lines 7-8, "**1500**" should be added to Fig. 19;

(2) page 23, lines 18 and 21, "**38**";

(3) page 24, line 1, "**40**".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because

(1) Fig. 19, "**20c**" should be – **20C** --.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

Art Unit: 2625

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

(1) page 34, line 10, "**(YES)**" should be – **(NO)** --.

Appropriate correction is required.

5. The abstract of the disclosure is objected to because

(1) The number of words in the abstract exceeds the maximum allowed by 35 U.S.C. 111, which is 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

6. Claims 2-4 objected to because of the following informalities:

(1) claim 2, line 5, "the **selecting step**" should be – the **selection mode** --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A "computer program" is being recited; however a "computer program" as presented in the claims is directed to software per se. This subject matter is not limited to that which falls within a statutory category of invention because it is limited to a process, machine, manufacture, or a composition of matter. Software is a function descriptive material and a function descriptive material is non-statutory subject matter.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa et al. (US Patent 6,507,411) in view of Endo et al. (US Patent 5,987,227).

(1) regarding claims 1, 6, 10 and 11:

Art Unit: 2625

Nishikawa '411 discloses a method of controlling printing by which a printer capable of double-sided printing prints two consecutive pages of print data on both sides of medium (column 6, lines 46-47) and also enlarges and divides each of the pages of print data so that resultant data is printed over a plurality of media (column 9, lines 22-34), comprising:

a first dividing step of dividing a first page of print data into a predetermined number of pieces of print data (column 9, lines 24-28);

a second dividing step of dividing a second page of print data into the predetermined number of pieces of print data (column 9, lines 24-28, where it is assumed that if it can divide one image it can do the same with another or even multiple images);

Nishikawa '411 discloses all the subject matter as described above except a selecting step of selecting one from the predetermined pieces of print data obtained by dividing the first page of print data in the first dividing step, and selecting one from the predetermined pieces of print data obtained by dividing the second page of print data in the second dividing step; and

a printing step of printing the one piece of the first page of print data and the one piece of the second page of print data selected in the selecting step, on a front side and a back side, respectively, of a medium.

However, Endo '227 teaches a selecting step of selecting one from the predetermined pieces of print data obtained by dividing the first page of print data in the first dividing step (column 3, lines 8-12, where the image it is being selected from the

images stored in memory), and selecting one from the predetermined pieces of print data obtained by dividing the second page of print data in the second dividing step (column 3, lines 8-12, where the image it is being selected from the images stored in memory and it is assumed that if can do this with one image it can do it with another or multiples images); and

a printing step of printing the one piece of the first page of print data and the one piece of the second page of print data selected in the selecting step, on a front side and a back side, respectively, of a medium (columns 17-18, lines 66-67 and 1-11 respectively, where in a double sided function two images have to be put opposite to each other as the definition and functionality of double sided printing states).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a selecting step of selecting one from the predetermined pieces of print data obtained by dividing the first page of print data in the first dividing step, and selecting one from the predetermined pieces of print data obtained by dividing the second page of print data in the second dividing step and a printing step of printing the one piece of the first page of print data and the one piece of the second page of print data selected in the selecting step, on a front side and a back side, respectively, of a medium as taught by Endo '227 in the system of Nishikawa '411. With this the system will be able to print two consecutives images in a single sheet of paper, thus making the system environment friendly and cost effective by saving resources such as paper.

A computer program and a computer readable medium storing a computer program could be easily found in Nishikawa '411 column 15, lines 56-59.

(2) regarding claim 2:

Nishikawa '411 discloses all the subject matter as described above except a designating step of designating a selection mode for the second page of print data, wherein the selecting step includes selecting the one piece of the second page of print data corresponding to the one piece of the first page of print data, in accordance with the selection mode designated in the designating step.

However, Endo '227 teaches a designating step of designating a selection mode for the second page of print data (column 3, lines 8-12 and columns 17-18, lines 66-67 and 1-11 respectively, where by selecting the double-sided printing option, the option itself selects a second page of print data as the definition of the term double sided printing itself states), wherein the selecting step includes selecting the one piece of the second page of print data corresponding to the one piece of the first page of print data, in accordance with the selection mode designated in the designating step (columns 17-18, lines 66-67 and 1-11 respectively, where by selecting the double-sided printing option, the option itself selects a second page of print data that follows the first page of print data as the definition of double sided printing itself states).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a designating step of designating a selection mode for the second page of print data, wherein the selecting step includes selecting the one piece of the second page of print data corresponding to the one piece of the first page

of print data, in accordance with the selection mode designated in the designating step as taught by Endo '227 in the system of Nishikawa '411. With this the system will be able to print two consecutives images in a single sheet of paper, thus making the system environment friendly and cost effective by saving resources such as paper.

(3) regarding claim 3:

Nishikawa '411 further discloses wherein the designating step includes designating the selecting mode so that output orders for the front and back sides are laterally reverse to each other (column 16, lines 14-21, where the user can specify which way to print the divided images).

(4) regarding claim 4:

Nishikawa '411 further discloses wherein the designating step includes designating the selection mode so that output orders for the front and back sides are laterally the same (column 16, lines 14-21, where the user can specify which way to print the divided images).

(5) regarding claim 5:

Nishikawa '411 further discloses wherein the first dividing step includes dividing the first page of print data into the number of pieces of print data equivalent to the number of the plurality of media (column 9, lines 24-28), and

the second dividing step includes dividing the second page of print data into the number of pieces of print data equivalent to the number of the plurality of media (column 9, lines 24-28, where it is assumed that if it can divide one image it can do the same with another or even multiple images).

(6) regarding claim 7:

Nishikawa '411 discloses all the subject matter as described above except setting means for setting whether the predetermined number of pieces of print data divided by the second dividing means are printed under double-sided printing.

However, Endo '227 teaches setting means for setting whether the predetermined number of pieces of print data divided by the second dividing means are printed under double-sided printing (columns 17-18, lines 66-67 and 1-11 respectively, where it is an option to select double-sided printing).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have setting means for setting whether the predetermined number of pieces of print data divided by the second dividing means are printed under double-sided printing as taught by Endo '227 in the system of Nishikawa '411. With this the system will be able to print two consecutive images in a single sheet of paper, thus making the system environment friendly and cost effective by saving resources such as paper.

(7) regarding claim 8:

Nishikawa '411 further discloses second setting means for setting whether an output order of the second page of print data is set to the same as that of the first page of print data when the print data is printed under double-sided printing (column 16, lines 14-21, where the user can specify which way (order) to print the divided images).

(8) regarding claim 9:

Nishikawa '411 further discloses wherein when the output order of the second page of print data is set to the same as that of the first page of print data by the second setting means, the selecting means selects the second page of print data in the same order as that of selecting the first page of print data (column 16, lines 14-21, where the user can specify which way (order) to print the divided images), and

when the output order of the second page of print data is set in laterally reverse to that of the first page of print data, the selecting means selects the second page of print data in laterally reverse to an order of selecting the first page of print data (column 16, lines 14-21, where the user can specify which way to print the divided images).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lennin R. Rodriguez whose telephone number is (571) 270-1678. The examiner can normally be reached on Monday - Thursday 7:30am - 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lennin Rodriguez
10/10/07

A handwritten signature in black ink, appearing to read 'K. Y. Roon', with a stylized, flowing script.

KING Y. ROON
SUPERVISORY PATENT EXAMINER